

ARSENICALS FOR KILLING WORMS

Annual Loss From Cabbage Pest Conservatively Estimated at \$1,300,000.

NOT DIFFICULT TO CONTROL

Arsenicals of Lead and Paris Green Are Preferable to Other Poisons—Number of Sprays Depends on Conditions.

(Prepared by the United States Department of Agriculture.)
Arsenicals are being generally used to control the cabbage worm. There are now few instances of the total destruction of crops of cabbages as was formerly often the case. Nevertheless, a conservative estimate would place the present annual loss from this pest to cabbage alone—not including cauliflower and other related crops—at \$1,300,000, or one-tenth the value of the entire crop.

The cabbage worm is not difficult to control, and it should be borne in mind that most other cabbage pests, more often present than not, will be controlled by the same methods.

Poisons Preferred.

Repeated experiments have shown that arsenate of lead and paris green are preferable to other arsenicals in common use. If paris green is used, it may be applied either wet or dry, preferably, however, as a spray. The rate of one pound to 50 gallons of water. The plants should be free from insect attack when they are set out and should be sprayed a few days later to make sure that the poison reaches the young caterpillars before they have burrowed far into the heads. Other applications should follow as necessary.

These applications of arsenicals can be made with absolute safety even after the heads are formed, as the poison disappears from plants almost completely within two to three weeks after application, and even earlier in event of repeated or heavy rainfall.

Increased Cost.

Scarcity of paris green has increased the cost. Arsenate of lead has been rapidly superseding paris green and other arsenicals as an insecticide and

has not increased proportionately in price. For many reasons it is preferable.

It serves the same purpose as paris green and is applied in the same manner. It is sold both in paste and in dry powder form. Two pounds of dry arsenate to 50 gallons of water or bordeaux mixture will make a solution of sufficient strength to destroy cabbage worms and similar insects. The paste form must be used at double strength, four pounds to 50 gallons of water.

The number of sprays depends on local and seasonal conditions. Sometimes a single spraying will suffice, but usually two or three are necessary. The advantage of the spray material is promoted by the addition of about the same amount by weight of resin oil soap as of the arsenical used.

DIG UP OLD RHUBARB STALKS

Divide Rhubarb Into Pieces of Two or Three Eyes Each and Start Entirely New Patch.

After rhubarb has been planted four or five years the stalks become so thick that they are too small to sell well. It is then best to dig up the roots and divide into pieces of two or three eyes each, which is enough for one hill, and start a new patch. Another good way is to dig up all the hill but a little corner which is left undisturbed, then fill the hole from which the roots were taken with well rotted manure and cover with straw. The new roots left in the ground will make a surprising growth the same season.

Tell Ages of Sheep.
Age of sheep can be told by the teeth. A yearling has two broad teeth in center of front lower jaw. Two years old, four broad teeth; three years old, six broad teeth.

Get Back to Clover.

The federal department of agriculture is advising farmers to get back to clover. This advice is for the sake of the land which was kept busy producing wheat in war time.

Early Asparagus.

To have early asparagus one must use the forcing process which is not practiced to any great extent in the United States, but in Europe is of considerable importance.

Handling Soy Beans.

Soy beans are cut and handled similarly to other dry crops. Some difficulty in cutting, making and curing is encountered when seedling in cultivated crops.

Give Fruit Trees Care.

Prune the fruit trees about the place. Do not let them get out of shape and too tall and ungainly. Remove all the dead branches and straighten them up.

Preparation of Seed Bed.

Methods of preparation of the seed bed vary with the soil, the season and the crop to be planted.

Planting Snap Beans.

In planting snap beans use the stringless varieties.

THINNING IMPROVES VALUABLE WOODLAND

Lack of Proper Treatment Is Cause of Much Loss.

Farmer Should Take Steps to Give Trees Sufficient Light and Soil Moisture for Them to Thrive and Become Profitable.

Lack of proper thinning and cutting is a common cause of woodlands being unprofitable, according to a recent bulletin entitled, "Making Woodlands Profitable in the Southern States," issued by the United States department of agriculture. Nature usually over-crowds trees in a given space, and this publication, and so steps should be taken to give them sufficient light and soil moisture to thrive and become profitable.

By positively controlling the number of trees on a tract it is possible to increase their rate of growth and eventually their size. Except for the production of cordwood, a few large trees on a given area are usually more desirable than many small ones. If possible, valuable kinds of wood should be grown in preference to common woods which bring lower prices. Woodlands

are not difficult to control, and it should be borne in mind that most other cabbage pests, more often present than not, will be controlled by the same methods.

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My Lady Nicotine



SIR WALTER RALEIGH

By JOHN DICKINSON SHERMAN.

MY LADY NICOTINE is a most interesting personage. As is frequently the case with ladies with a past, she is more interesting than those who have only a future. Her present certainly is a going concern. And her future has added fascination of sufficient mystery to induce considerable speculation.

My Lady Nicotine's influence is not always soothing. Like all great personages she has made enemies. Men began to fight over her a long, long while ago, and only the other day the newspapers told of the first of a possible recurrence of the night raiders' outrages in Kentucky. Urban VIII and Innocent XI fanned against her. Sultan Amurat IV decreed death by torture to her devotees. James I of England issued his "Counterblast to Tobacco," in which he denounced her as a creature of the "pit that is bottomless." Lucy Page Gaston of Anti-Cigarette League of America fame is suspected of a desire to pry her bonnet into the presidential ring. Low on the horizon, no bigger than a woman's hand, is a cloud which rumbles "tobacco smoke."

Possibly some of My Lady Nicotine's famous devotees have loved her for the enemies she has made. Anyway, Spenser wrote of her as "divine." Byron said "sublime." Lamb declared his affection thus:

"For the sake, tobacco, I would do anything but die."

Bulwer-Lytton wrote: "The man who smokes thinks like a sage and acts like a Samaritan." Kipling profoundly reflects that "a woman is only a woman, but a good cigar is a smoke." Mark Twain suspects that the man who doesn't smoke loses "an appalling aggregate of happiness."

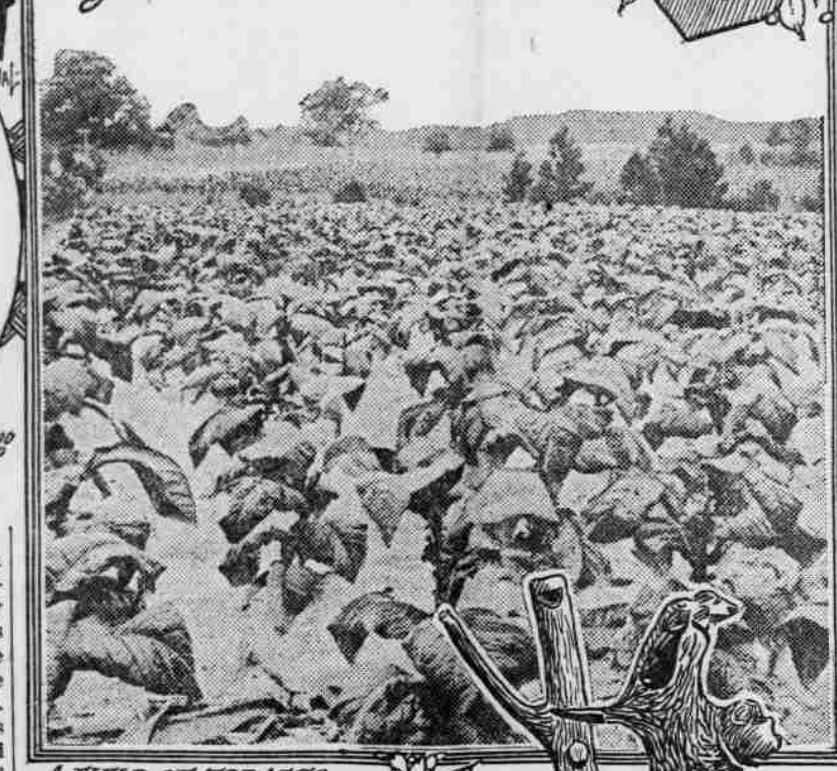
This sort of worshiper clings to the theory that this is a pretty good old world after all. He isn't worrying about spirit manifestations and is not concerned over the doctrine of the subliminal soul. He suspects Lucy Page Gaston of being a spiritual descendant of the Puritans who condemned her, but he doesn't care much because it gave pain to the bear as he gave pleasure to the smoker.

"When doctors disagree, who shall decide?" The doctors are as divided in their opinion of My Lady Nicotine as are the literary lights. Some see in her a veritable plague to humanity. Others maintain that she is rather a benefactor. Of course most of the hold that smoking is bad for young and growing specimens of the human species. And probably most of them are not prepared to advise that women should smoke. And there are certainly some men who cannot smoke without ill effects—just as there are men who cannot eat strawberries or drink coffee without harm. A cold bath in the morning is meat and drink to some; it would put others under the sod in short order. Probably the majority of up-to-date medical men are of the opinion that it has yet to be proved that smoking in moderation hurts any normal man.

At one extreme of human judgment is that of the man who wrote that a nation which smokes tobacco perishes. At the other is that of the man who predicted in 1918 that America would win the war because it was the heaviest smoker of all the nations.

My Lady Nicotine needs no press agent and has no trouble about breaking into print. Some enthusiastic collectors of "Niviana" have whole libraries about her. There is one George Arens, Jr., of New York—who is the proud possessor of more than 2,500 books, booklets and pamphlets devoted wholly or in part to her. These libraries tell pretty much everything about the lady.

No European ever heard of tobacco until the first week of November, 1492. The commonly accepted version of the story is that two sailors sent by Columbus to explore the island which he named San Salvador returned with a tale of natives who carried firebrands



A FIELD OF TOBACCO



LUCY PAGE GASTON

whose smoke they inhaled and puffed out of their mouths and noses. Later they discovered that the leaves of a plant were rolled in the form of cigars. The natives called "tobacco."

The first clear account of smoking was given in 1526 by Gonzalo Hernandez de Oviedo in his "Historia General de las Indias." He said the practice was pernicious and "used to produce insensibility." He reported that in Cuba and most of the islands the natives smoked rolls of herbs, "which they called tobacco," while on the mainland they inhaled through the forks of a Y-shaped hollow cane which they inserted into their nostrils. This instrument the natives called "tobaco."

The Spaniards thought the name was that of the fuel instead of the pipe, hence our word tobacco. Oviedo pointed out the mistake, but "tobacco" had worked itself into the white man's language, and there it stayed. The herb itself was variously known among the natives. It was "colihua" to the Caribs, "petun" to the Brazilians, "pielcel" to the Mexicans and "upwoc" to the Indians of Virginia.

Nicotine, the active chemical principle of tobacco, is an intensely poisonous alkaloid, named from Nicot, who introduced tobacco into France as a medicinal plant. Hence, finally, "My Lady Nicotine."

Not essentially new are any of the modern forms of tobacco. The leaves wrapped about with corn husk roughly correspond to our civilized cigarette; the leaves rolled without wrapping of another material to our cigar. Tobacco was powdered into snuff and taken into the nostrils as early as 1610. For the first time more leaf tobacco went into cigarettes than into cigars, the two numbers being 177,000,000 pounds and 162,000,000 pounds.

The government derived from the internal revenue tax on tobacco \$200,000,000, an increase of \$40,514,431 over the preceding year. More than \$85,500,000 of the tobacco money came from cigarettes. Recently the tobacco tax has been heavily increased.

Altogether, we used 407,079,920 pounds of tobacco last year. We got away with 174,697,408 pounds of pipe, 17,400,465 pounds of twist, 9,800,225 pounds of finecut, 257,893,440 pounds of smoking tobacco and 37,190,382 pounds of snuff.

The value of the tobacco crop to the farmer was estimated last year at \$542,547,000. The average price he got for it was 39 cents a pound. He gets more now.

More than \$1,500,000,000 a year is the value of tobacco products manufactured in the United States. More than a million and a half acres of land are devoted to the growing of the "weed." On the manufacturing side the government estimate of the capital invested in 1914 was \$908,830,000, which was a year and \$200,000 cigar smokers each destroying 1,500 cigars.

PROFIT IN A FINE

The existing peculiar conditions in the international money market can produce very strange and paradoxical phenomena. Here is a case in which the exchange actually trades at a premium to a reward. In 1916 a man from across the Baden frontier was arrested in Switzerland for smuggling. He was released on bail of 5,000 francs, which then cost him 7,500 marks. For some reason the case

dragged on and was decided only quite recently. The accused was sentenced to a fine of 3,000 francs cost. He received as the balance of his bail, 1,700 marks, which he changed for 24,000 marks. Consequently, his little adventure brought him in a net profit of 16,500 marks. As one of the humors of the exchange this deserves to be coupled with the case of a Swiss brewer, which is said to have found it

TO WIN SUCCESS.

The trouble with a great many people is that they are not willing to make present sacrifices for future gain. The tools for self-improvement are at your hand. Use them. If the axe is dull the more strength must be put forth. If your opportunities are limited you must use your energy, but forth more effort. Progress may seem slow at first, but perseverance assures success.—Orison Sweet Marden Jr. Chicago News.

JAPS SEEK GERMAN BUSINESS

Commercial firms of Nippon eager to resume relations with their former enemies.

Berlin.—Japanese commercial firms are making great efforts to resume business relations with Germany. One Japanese shipping company has opened its office in Hamburg, and a regular steamship service is running to Japanese ports. Copper and silk are the main exports from Japan to

BLOUSE IN STYLE

Old Shirt Waist Has Developed Into Real Necessity.

Present Day Garment Often Real Work of Art; New Jewel of the Wardrobe.

It is indeed a far cry back to the old-fashioned shirt waist, which served to set the pace or blaze the trail for the varied procession of blouses that have followed each other down the passing years.

The first blouse was really a serene, tailored "shirt" worn with a high collar sometimes attached. Occasionally it was a stiff, mannish affair, far from comfortable and seldom really becoming. A cravat or scarf was its accompaniment. However, as time passed, the shirt or blouse became more distinctly feminine, and today it is often a real work of art—the jewel of the wardrobe.

Figured foulard blouses are being shown for the spring and summer, and very attractive they are. Figured materials lend themselves best to the simplest of style designs. The woman who wants to make her own blouses, but is not sufficiently skilled to work out elaborate fashion ideas, may do very well with lace—which requires only care in matching the pattern, added to good workmanship—and with figured silks, which will reward her with satisfactory results when the same points are considered and observed. In determining the question of color

along the path of the centuries had almost lost the cigarette, found it again in England, and so it came back to us.

For a time most cigarettes were made from the Turkish leaf. Then it was discovered that the "bright" American tobacco, now grown in Virginia, the Carolinas and eastern Tennessee, made an agreeable cigarette. Eventually cigarette making machinery was invented, and today American cigarettes, both "straight" and "blended," are smoked all over the world.

In 1888 not enough cigarettes were consumed in the United States to be subjected to the internal revenue tax. In recent years the increase has been by billions. From 1888 to 1914 it was 500 per cent. In the past two years the demand has advanced prodigiously, probably largely because of the war.

In 1910, for the first time, the manufacture of cigarettes exceeded that of cigars. Their relative numbers being 8,200,000,000 and 8,000,000,000. Since then, while cigarettes have multiplied, cigars have just about stood still. In the year ended June 30, 1919, the number of cigarettes was 46,500,000,000, and of cigars approximately 8,000,000,000. For the first time more leaf tobacco went into cigarettes than into cigars, the two numbers being 177,000,000 pounds and 162,000,000 pounds.

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WAY OF THE TAFFETA FROCK

Garment Takes On Almost School-Girl Air When It Is of Navy Silk.

The way of the taffeta frock is long this season, but for all its guips and frills it does descend quite often to a certain tailored primeness appropriate for the street. Thus it takes on almost a school-girl air when it is of navy silk, very soft with accordion-plated skirt, long straight bodice with the back ends issuing from the side seams, a yoke extending over to the kimono sleeves, and a trim little round collar of itself divided front and back. The thing that redeems it from monotony is a clever use of lighter blue piquet ribbon which is folded over the collar, sleeves and bodice edges to make a unique narrow trimming.

The outstanding features of the taffeta frocks—and no pun at that—are the bouffant hip effects. Whether these effects are gained by pockets, panniers, or what, at least there is always a suggestion. Yests are seen quite often, ruffles or shirring encircle the skirt frequently. Altogether the 1920 girl is perky and pretty in her taffeta frock.

While a great many navy taffetas in the plainer frocks are in evidence, the taffeta shade of greatest favor seems to be brown. This is good news, for one does like to change from navy serge or tricot to another color, and these beige and sand-colored tricot and gabardines of which a few very good-looking street frocks are not becoming or serviceable enough for the majority of us.

MATERIALS FOR SPORT WEAR

Crepes, Voiles, Japanese Silk, Linen Among Favored Fabrics—Many Colors Are Used.

The materials for sport blouses may be almost anything. Crepes, voiles, Japanese silk, linen—all of these are good. Japanese crepe is popular this year for the smock, and it takes kindly to the sport hat. Sport blouses are another invention brought out by the sport designer, and certainly nothing can be more effective than the blouse trimmed in this wise.

Among the colors most seen for sport wear may be mentioned first of all, copper, that tint which has ravaged almost every domain of dress. This, together with canary, jade green, henna, el, blue and rose, is met with constantly in everything from the duvety coat to the sport hat. Sport blouses are used. Also, fawn, taffeta and hemp. Shantung hats are an innovation of the spring, and these are generally in color. A canary tinted

UNUSUAL AFTERNOON GOWN



UNUSUAL AFTERNOON GOWN

Navy marked with decorated floral designs in white. Beading is introduced in an interesting manner. The hand-embroidered collar affords a dainty finish.

The church costume for the second wedding has come to have a new charm. It must, however, be a gown of fine distinction. For the second wedding all that tends to display must be avoided. Yet the gown must be youthful and discreetly gay. It is neither an afternoon nor an evening gown, but an individual costume for this special occasion.

French brides are wearing gowns made of soft-colored satin and chiffons, since the white gown is out of place.

For the church ceremony the veil is an essential, but it differs from that of the first wedding in that it must always be worn with a hat. It may be draped as a mantilla or as a slight veil reaching to the eyes.

Another essential to the costume of remarriage is the prayerbook. Fortunately the bride who is willing to pay for more expensive lace without concerning herself to show off their delicate design. In fact, she wears her lace quite differently from the way lace used to be worn. Once, you know, lace was usually applied in a smooth piece, a collar or a bolero, or as strips, but now even costly lace is plaited or looped up and used with the most amazing lavishness.

Popular Trimming.

As a trimming on both hats and frocks, there is to be seen in Paris much effective flowers and sprays of raffia embroidery.

HOW LINEN MAY BE BLEACHED

Clothes Should Be Soaked Twenty-Four Hours in Water to Which Borax Is Added.

Linen which has become an ugly shade owing to bad washing can be improved by bleaching. Soak the clothes for 24 hours in water in which a tablespoonful of borax to every gallon has been dissolved. Then wash them thoroughly in hot water. Wring out, place in the boiler, cover with cold water, add a pound of soap cut in shreds to every four gallons, a handful of soda and a tablespoonful of cloudy ammonia or turpentine. Bring slowly to the boil and leave for about fifteen minutes. Do not put too many things in at once, as the articles must have room to move. When they are done, wring them out in water with soda. Sprinkle from time to time with water as they dry. When a good color is obtained rinse in several tepid waters, blue them and dry again.

Plain Linings the Mode.

The unexpected always happens. Following a huge demand for figured fabrics, fashion decides that it is smarter to line one's wrap in plain colors. Sometimes linings repeat the color of the outer material, sometimes they are in direct contrast to it; but in the majority of cases the surface is not printed. There is an inclination to reserve figured fabrics for frocks, many of those shown for summer being ablaze with color and design.

Tiny Fur Neck Pieces.

The woman who invested in one of the tiny fur neck pieces last spring need not worry as to whether or not this fur piece will be good style this season. The little single or two-skin pieces are just as popular as when they came in a year ago and with a smartly tailored suit or frock a mink or sable fur piece is very chic.

IMPROVED UNIFORM INTERNATIONAL SUNDAY SCHOOL LESSON

(By REV. P. B. FITZWATER, D. D., Teacher of English Bible in the Moody Bible Institute of Chicago.)
(Copyright, 1920, Western Newspaper Union.)

LESSON FOR JUNE 6

SAUL'S FAILURE.

LESSON TEXT—1 Sam. 15.
GOLDEN TEXT—For thou hast rejected the word of the Lord, and the Lord hath rejected thee.—1 Sam. 15:23.
ADDITIONAL MATERIAL—1 Sam. 14:4-14.
PRIMARY TOPIC—A King Who Disobeyed God.
JUNIOR TOPIC—How Saul Lost His Kingdom.
INTERMEDIATE AND SENIOR TOPIC—Why Saul Failed.
YOUNG PEOPLE AND ADULT TOPIC—The Strength and Weakness of Saul's Character.

This is one of the saddest pictures in Bible history. No one has had a brighter prospect before him than Saul, and no one has made a greater failure. He possessed strong natural gifts, the qualities of a great king. He had a fine physique, which greatly favored one's success in life, other things being equal. He had the benefit of Samuel's advice and godly life, which was of inestimable value.

I. The Command to Saul (vv. 1-3). He is commanded to utterly exterminate the Amalekites, leaving neither people nor booty. The reason assigned is their evil treatment of Israel as they came up out of Egypt (Ex. 17:8; Deut. 25:17). This command may seem cruel, but we must remember that it was given by the Lord, who has the right to kill or to make alive. The wickedness of this people was very great. Their judgment was only such as their sin deserved. It was not Israel's act, but God's, Israel only being the sword in his hand. God is just as well as love. His love should not be emphasized at the expense of his justice.

II. The Disobedience of Saul (vv. 4-10).

He renders a partial obedience. Agag, the king, is spared and the best of the goods is appropriated. The purpose of God's thoroughgoing command was to show that it was a warfare of judgment for wickedness, not for greed. Saul only obeyed as far as his inclinations led him. The obedience to God which is limited by the heart's inclination is the worst kind of obedience.

III. Saul Rebuked by Samuel (vv. 10-23).

1. Samuel cures to God (v. 11). The news of this disgraceful act greatly disturbed Samuel, causing him to cry to the Lord all night.

2. Saul's hypocritical pretense (vv. 15, 16). Saul met Samuel with the pretense of having executed the Lord's commandment. The pretense carried a lie upon its face. Those who are the most willing to speak of their obedience are the ones who are conscious of disobedience, and their consciences trouble them over it. Though disturbed by a guilty conscience he tried to conciliate Samuel, the prophet, but the very bleating of the sheep and the howling of the herds betrayed him.

3. Samuel rebuked Saul (v. 17). This is always a hard thing. Samuel carried the crime made for some excuse can be made for it. He then played the hypocrite by trying to make it pass as an act of devotion to God (v. 15). He should have known that things gained by disobedience to God are an abomination to him. Offerings to God of ill-gotten gains can never atone for sins of disobedience and neglect. Saul tried to justify himself by pleading that he was keeping the spirit of the commandment, while not literally carrying out its requirements. He has many successful today who do not believe in the literal interpretation and practice of God's Word.